

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL2004/000623

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 B01D69/00 B01D67/00 B01D71/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 801 379 A (RUEGG THOMAS ET AL) 31 January 1989 (1989-01-31)  the whole document -----	9-11, 13-15, 17-21
X	US 4 923 608 A (TRETZEL JOACHIM ET AL) 8 May 1990 (1990-05-08) the whole document -----	1,6,8,9, 13,14,16
X	US 2003/100136 A1 (DOUGHERTY GEORGE M) 29 May 2003 (2003-05-29) abstract; figures 1-2E paragraphs [0009], [0011], [0013] - [0015], [0029] - [0037], [0064] ----- -/-	9,10,13, 14,16

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the International search

13 December 2004

Date of mailing of the International search report

21.03.2005

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 797 211 A (EHRFELD WOLFGANG ET AL) 10 January 1989 (1989-01-10) the whole document in het bijzonder, kolom 3, regel 60 - kolom 4, regel 3	9,13,16, 17,19
A	-----	1,2,6
X	WO 03/035233 A (BABA MASAKAZU ;IIDA KAZUHIRO (JP); KAWAURA HISAO (JP); SANO TORU () 1 May 2003 (2003-05-01) abstract; figures 1,2,5,20	9,13,16, 17,19
A	----- WO 95/13860 A (RIJN CORNELIS JOHANNES MARIA V) 26 May 1995 (1995-05-26) cited in the application the whole document	1-21
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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/NL2004/000623

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-21

Remark on Protest

The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-21

- A method for manufacturing a microsieve comprising the steps of:
  - \* etching the pores in a first predetermined spatial pattern;
  - \* providing a second predetermined spatial pattern of height variations in the cross flow surface of the membrane, so that within a vicinity of a majority of the pores, at a distance of less than ten pore sizes from each of the pores in the majority, at least one of the height variations is provided.
  - A microsieve obtained by the above method.
  - A filtering apparatus provided with the above mentioned microsieve

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2. claims: 22-35

- A microsieve provided with a membrane layer and a supporting layer, wherein the membrane layer is divided into mutually separate first and second membrane surfaces, wherein the membrane surfaces are elongate in shape, and longitudinal in shape, and longitudinal directions of the first membrane surfaces run substantially parallel relative to each other, longitudinal directions of the second membrane surfaces run substantially parallel relative to each other, and the longitudinal to each other, and the longitudinal direction of the first membrane surfaces makes an angle different from zero with the longitudinal direction of the second membrane surfaces.
- A filter assembly provided with such a microsieve

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3. claim: 36

- A method for manufacturing a microsieve provided with a supporting layer and a membrane layer with pores, in which method openings are etched with a wet anisotropic etching process.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/NL2004/000623

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4801379	A	31-01-1989	CH AT DE DK EP FI JP NO	671709 A5 73687 T 3777480 D1 230187 A 0254103 A1 871954 A 63031516 A 872990 A	29-09-1989 15-04-1992 23-04-1992 24-01-1988 27-01-1988 24-01-1988 10-02-1988 25-01-1988
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